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(54) **PROCESS FOR INHIBITING TIN WHISKER THROUGH PRE-TREATMENT**

(57)Abstract:
PROBLEM TO BE SOLVED: To effectively inhibit tin whisker generation through a simple operation in a tin-coated film formed on the surface of a copper matrix or other materials to be plated to ensure good solderability, or the like.
SOLUTION: In the subject process, tin whisker generation is inhibited through a pre-treatment step wherein (a) a metal thin film for base coating selected from silver, palladium, platinum, bismuth, indium, nickel, zinc, titanium, zirconium, aluminum, chromium and antimony is formed on the material to be plated, and (b) a tin- or thin alloy-plated film is formed on the metal thin film. The specific metal thin film interposed as a barrier between the material to be plated and the tin film in the upper layer prevents the formation of intermetallic compounds between tin and copper, and effectively inhibiting tin whisker. Compared to the conventional annealing treatment, the tin whisker-inhibiting process is more simplified, especially by forming the thin film by soaking the material to be plated into the pre-treatment solution.

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